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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,291	11/26/2003	James R. Rosseau	GP-303187	5563

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EXAMINER	
NGUYEN, THU V	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/723,291	ROSSEAU, JAMES R.	
	Examiner	Art Unit	
	Thu Nguyen	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The amendment filed on October 13, 2004 has been entered. By this amendment, claims 8-10 have been added and claims 1-10 are now pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa et al (US 5,591,906) in view of Sharp (US 5,569,848) and Jackson et al (US 6,237,234).

As per claim 1-3, Okawa teaches a system of determining tire pressure faults in a vehicle, the system comprises: determining the number of tire revolution of a first and second tire (col.4, lines 10-11); comparing the number of revolutions of the first and second tire using the ratio between the tires to determine if pressure fault has occurred (col.4, lines 10-26). Okawa does not suggest using distance value for the comparison. However, Okawa teaches using rotational angular velocity value (col.4, lines 10-11), further since Sharp teaches that it is well known to determine distance from the rotation angular speed using an odometer, and there is a close relation between the rotation angular speed and distance (col.4, lines 18-61), and Jackson teaches specific relationship between distance travel and the angular speed (col.4, lines 55-59), it would have been obvious to a person of ordinary skill in the art at the time the invention was

made to use the distance determined from the wheel rotational speed taught by Sharp and Jackson to determine the tire pressure abnormality of Okawa in order to use the same output distance determined from the odometer to check for the pressure fault of the wheels, since utilizing the distance determined from the number of pulses output from a sensor in a fixed amount of time, or utilizing the number of pulses outputted from the speed sensor as preferred by the designer requires only routine skill in the art.

As per claim 4-6, refer to claims 1-3 above.

As per claim 7, Okawa teaches coupling the sensors to an ABS system (col.3, lines 63-67).

As per claim 8, Okawa teaches determining tire pressure fault by analyzing a ratio of wheel speed traveled by at least two wheels (col.17, lines 16-22). Concerning using distances instead of wheel speed, refer to claim 1 above.

As per claim 9-10, Okawa teaches a conventional method of detecting tire pressure by direct measurement of the pressure of the tire using pressure sensor (col.1, lines 22-28), when the method for direct measuring the pressure of the tire is used, the speed, and the time are just independent factors from determining a tire pressure.

Response to Arguments

3. Applicant's arguments filed on October 13, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument on page 4, last two paragraphs, it is admits that the cited prior arts mainly teach using wheel speed in judging tire pressure fault. However, prior art of record, especially Sharp teaches that the distance of the underinflated tire is proportionally smaller than the normally inflated tire (sharp col.4, lines 11-14), therefore, in view of sharp's teaching in col.4, lines 11-14, using distance in determining pressure fault of a tire instead of using wheel speed for determining pressure fault of a tire would have been obvious matter of choice of available knowledge concerning determining inflation status of a tire. The advantage of using distance in determining pressure fault of a tire as high lighted by applicant's in the last eight lines of the second to the last paragraph is noted, however, independent claims do not explicitly teach ***how*** the distance is obtained without using the time or the wheel speed factor. Since it would have been well known that the distance can be obtained from the wheel speed and the travel time, broadly claimed "distance" encompasses using the wheel speed and the time in calculating the distance, and as admit by the applicant, the calculation of distance based on the wheel speed and time would have been well known and does not appear to have any better advantage over using wheel speed in determining pressure fault of a tire.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 22, 2004

THU V. NGUYEN
PRIMARY EXAMINER